d.) Remarks

In the instant Office Action the primary reference relied upon in rejecting all claims is the Kuchinsky publication no. 2002/0178185. Kuchinsky describes a computerized system for organizing complex information, such as experimental data regarding chemical or biochemical processes, in order to comprehensively model a biological process that has many component reactions and interactions. Items such as gene segments, stages in a process, reactant concentrations, process parameters, and the like. These items are presented onscreen as nodes, and the user may construct a plausible explanation of the data by creating a "story". In this case, the story is formed by the user through the use of connecting lines that indicate relationships and correlations between the data nodes. The lines may convey different meanings between the data nodes, such as "promotes reaction", "inhibits reaction", or the derivative status of reaction components, and the like.

Thus in the broad sense the reference does describe a method for illustrating relationships between onscreen nodes, which are graphic objects, and the rejections based on the reference are well-taken.

However, there is a fundamental distinction between the reference and the present invention. In the Kuchinsky reference all of the associating, linking, and modifying of the data nodes occurs solely in an information "space". That is, Kuchinsky is directed toward creating a plausible set of connections between nodes. However, the data nodes, and the linking and modifying that the user applies to the nodes, do not create or transform any functional output that is

performed by the computer. The computer merely records the links and associations that the user inputs to the onscreen data nodes.

In contrast to Kuchinsky, the present claimed invention concerns onscreen objects that represent functional devices, such as faders that control the volume of an audio output, or knobs that control audio compression, echo, and the like. As noted in paragraph 121, referring to Figure 17,

> The signals from these console channels are directed by one arrow to a fader, and the signals from the fader are directed by another arrow to a generic signal processing channel, which is represented by a rectangle. The actions are by no way limited to audio signals. They can be equally effective for designating control and flow between any types of devices for anything from oil and gas pipelines to sending signals to pieces of test or medical equipment, processing video signals, and the like.

The significant point is that the graphic directional indicators drawn between the onscreen objects are interpreted by software to direct the computer to carry out a specific function, or task, or process that is above and beyond the mere recording of the associations between the onscreen elements (as in Kuchinsky). Thus, for example, the computer will, in response to the graphic directional indicators of Fig. 34B, actually play the PianoG4 sound file and produce a stereo left/right output that can be heard, or recorded, or processed, or whatever. The arrows of Fig. 34B direct that the faders control the left and right channel volumes, which are real outputs. In Kuchinsky, there is no real output, only a computer file that

annotates and memorializes the organization of the data nodes that the user may enter.

The Wall publication is cited for its use of bidirectional arrows, and here again the use is directed to data nodes and relationships between them. Once again, the output of this system is organized information, but not a real-world result like an audio playback, or a video playback, or the like, as in the present invention. Thus, although Wall does describe bidirectional arrows (albeit only to explain why they are not desirable to use), the Wall description does not remedy the failure of Kuchinsky to produce a real-world output.
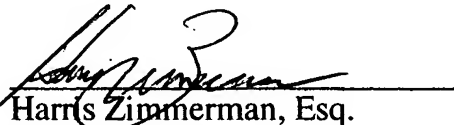
The claims have been amended to particularly point out the distinctions noted in the comments above. Claims 1-10 have been canceled, and claim 11 has been modified with the additional recitation regarding the fact that the graphic objects represent functional devices capable of operating on the computer to produce a desired output. This recitation is in contradistinction to Kuchinsky and Wall, as noted above, and takes the sole independent claim out of the realm of information processing and into the sphere of real world computer outputs that are controlled by the onscreen objects of the present invention. It is asserted that his distinction defines claim 11 over the prior art, and that claim 11 is thus patentable.

Remaining claims 12-20 depend from claim 11, further defining the patentable method of the independent claim, and are thus also allowable.

All claims now presented are submitted in the belief that they are allowable over the art, and that this application in condition for issuance. Action toward that end is earnestly solicited.

No new fee is required by this amendment.

Respectfully Submitted,

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